## **Claims**

- 1. An isolated articular chondrocyte which is characterized in that it mineralizes calcium.
- 2 An articular chondrocyte of claim 1 wherein a plurality of such chondrocytes are arranged in pellet form.
- 3. An articular chondrocyte of claim 1 wherein said chondrocyte is mature or derived from a mature individual and preferably an individual suffering from or having a predisposition for arthritis.
- 4. An articular chondrocyte of claim 1 wherein said chondrocyte is of fetal origin.
- 5. An articular chondrocyte of claim 1 wherein said chondrocyte is provided as a cell-line.
- 6. An articular chondrocyte of claim 5 wherein said cell-line is of human origin.
- 7. An articular chondrocyte of claim 1 wherein said chondrocyte comprises an oncogene.
- 8. An articular chondrocyte of claim 7 wherein said oncogene is temperature sensitive.
- 9. An articular chondrocyte of claim 8 wherein said oncogene is an SV40 T antigen.
- 10. A method for producing an articular chondrocyte cell-line that mineralizes calcium comprising.
  - a) immortalizing at least one human articular chondrocyte cell using an immortalizing agent; and

- b) culturing said immortalized cell in order to produce a population of human articular chondrocyte cells.
- 11. A method of claim 10 wherein said immortalizing agent is an oncogene.
- 12. A method of claim 11 wherein said oncogene is temperature sensitive.
- 13. A method of claim 12 wherein said oncogene is SV40 T antigen.
- 14. A method of claim 12 wherein the method further comprises the step of culturing said immortalized cell at the non-permissive temperature of the oncogene.
- 15. A method for identifying a therapeutic agent designed to treat arthritis comprising:
  - a) exposing isolated chondrocytes, or at least one chondrocyte cell-line, comprising articular chondrocytes that mineralize calcium to at least one test agent;
  - b) observing the nature of the response to said test agent; and
  - c) identifying any agent showing a response useful for treating arthritist.
- 16. A method of claim 15 wherein said observation involves an assessment of the amount of calcium mineralization associated with said chondrocytes or said chondrocyte cell-line.